

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): A scintillator panel comprising:

a multi-sided substrate made of amorphous carbon ~~as a major constituent~~;

a scintillator formed ~~on a first side of the substrate, said scintillator covering so as to~~
cover a substantial portion of ~~the~~ a first side of the substrate, with at least one portion of the first
side of the substrate being uncovered by the scintillator; and

a protective film substantially covering all exposed surfaces of the substrate and the
scintillator, including a second side of the substrate opposite the first side of the substrate as well
as the portion of the first side of the substrate uncovered by the scintillator.

Claim 2 (cancelled)

Claim 3 (Currently Amended): A scintillator panel according to claim 1, further
comprising a reflecting film, wherein said reflecting film is disposed ~~formed~~ between a radiation
emitting surface of said substrate and said scintillator.

Claim 4 (Original): A scintillator panel according to claim 3, wherein said reflecting film
is a metal film.

Claim 5 (Original): A scintillator panel according to claim 3, wherein said reflecting film is a thin transparent film having a refractive index lower than a refractive index of said scintillator.

Claim 6 (Original): A scintillator panel according to claim 5, wherein said thin transparent film is a film made of a material containing a substance selected from the group consisting of LiF, MgF₂, CaF₂, SiO₂, Al₂O₃, MgO, NaCl, KBr, KCl, and AgCl.

Claim 7 (Original): A scintillator panel according to claim 1, wherein the portion of the first side of the substrate uncovered by the scintillator is located adjacent to an edge of the first side of the substrate.

Claim 8 (Original): A scintillator panel according to claim 1, wherein at least two portions of the first side of the substrate are uncovered by the scintillator and the protective film substantially covers the portions of the first side of the substrate uncovered by the scintillator.

Claim 9 (Original): A scintillator panel according to claim 8, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to different edges of the first side of the substrate.

Claim 10 (Original): A scintillator panel according to claim 8, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to opposing edges of the first side of the substrate.

Claim 11 (Original): A scintillator panel according to claim 1, wherein multiple portions of the first side of the substrate are uncovered by the scintillator and the protective film covers the portions of the first side of the substrate uncovered by the scintillator, the portions of the first side of the substrate uncovered by the scintillator are located adjacent to different edges of the first side of the substrate, and the sides of the substrate connecting the first side and the second side are covered by the protective film.

Claim 12 (Original): A scintillator panel according to claim 11, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to opposing edges of the first side of the substrate.

Claim 13 (Original): A scintillator panel according to claim 1, wherein said protective film further covers at least a part of said substrate.

Claim 14 (Original): A scintillator panel according to claim 13, wherein said protective film covers entire surfaces of said substrate.

Claim 15 (Original): A radiation image sensor comprising an image sensing element placed to oppose said scintillator of said scintillator panel defined in claim 1.

Claim 16 (New): A scintillator panel comprising:
a multi-sided substrate made of graphite;
a scintillator formed so as to cover a substantial portion of a first side of the substrate, with at least one portion of the first side of the substrate being uncovered by the scintillator; and
a protective film substantially covering all exposed surfaces of the substrate and the scintillator, including a second side of the substrate opposite the first side of the substrate as well as the portion of the first side of the substrate uncovered by the scintillator.

Claim 17 (New): A scintillator panel according to claim 16, further comprising a reflecting film, wherein said reflecting film is disposed between a radiation emitting surface of said substrate and said scintillator.

Claim 18 (New): A scintillator panel according to claim 17, wherein said reflecting film is a metal film.

Claim 19 (New): A scintillator panel according to claim 17, wherein said reflecting film is a thin transparent film having a refractive index lower than a refractive index of said scintillator.

Claim 20 (New): A scintillator panel according to claim 19, wherein said thin transparent film is a film made of a material containing a substance selected from the group consisting of LiF, MgF₂, CaF₂, SiO₂, Al₂O₃, MgO, NaCl, KBr, KCl, and AgCl.

Claim 21 (New): A scintillator panel according to claim 16, wherein the portion of the first side of the substrate uncovered by the scintillator is located adjacent to an edge of the first side of the substrate.

Claim 22 (New): A scintillator panel according to claim 16, wherein at least two portions of the first side of the substrate are uncovered by the scintillator and the protective film substantially covers the portions of the first side of the substrate uncovered by the scintillator.

Claim 23 (New): A scintillator panel according to claim 22, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to different edges of the first side of the substrate.

Claim 24 (New): A scintillator panel according to claim 22, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to opposing edges of the first side of the substrate.

Claim 25 (New): A scintillator panel according to claim 16, wherein multiple portions of the first side of the substrate are uncovered by the scintillator and the protective film covers the

portions of the first side of the substrate uncovered by the scintillator, the portions of the first side of the substrate uncovered by the scintillator are located adjacent to different edges of the first side of the substrate, and the sides of the substrate connecting the first side and the second side are covered by the protective film.

Claim 26 (New): A scintillator panel according to claim 25, wherein the portions of the first side of the substrate uncovered by the scintillator are located adjacent to opposing edges of the first side of the substrate.

Claim 27 (New): A scintillator panel according to claim 16, wherein said protective film further covers at least a part of said substrate.

Claim 28 (New): A scintillator panel according to claim 27, wherein said protective film covers entire surfaces of said substrate.

Claim 29 (New): A radiation image sensor comprising an image sensing element placed to oppose said scintillator of said scintillator panel defined in claim 16.